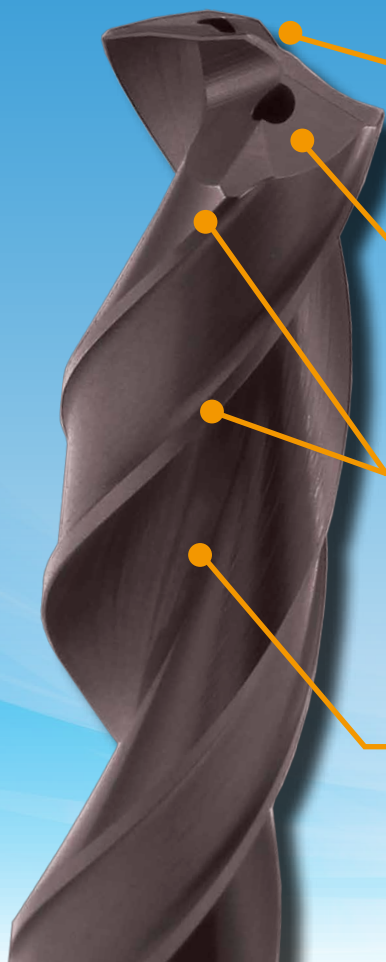


High Performance Drills for Stainless Steel & High Temperature Alloy

ステンレス鋼、耐熱合金用ドリル **DM Series**

- DMC is internal coolant drills, DMN is external coolant drills.
DMC シリーズは内部給油です。DMN シリーズは外部給油です
- NR tip with special R thinning design for excellent chip evacuation.
NR 最先端設計は優れた切りくず排出のための特別な R 設計です
- Optimized flute design and excellent polishing to enhance efficiency.
最適化されたフルート設計と優れた研磨により、加工効率が向上します
- **UNAX** is a new multi-layer AlTiCrN smooth coating.
UNAX コーティングは新多層 AlTiCrN スムースコーティングです

P	M	K	N	S	H
●	●	●		●	



140° NR tip design.
140° NR 最先端設計

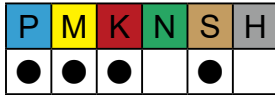
Internal coolant hole.
内部クラント

Double margin design provides stable drilling, good hole wall and high precision.
ダブルマージン設計は穴あけ加工の安定性を提供し、良好な直角度および高精度を実現

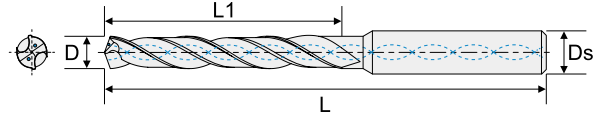
UNAX smooth coating with low spindle load, avoiding sticking and good chipping resistance for longer tool life

UNAX スムースコーティングは、スピンドル負荷の少ないのため、抗粘着性と優れた耐チップングで、工具寿命を延長

DMC - Internal Coolant · 3D for Stainless Steel ステンレス鋼、耐熱合金用内部給油ドリル



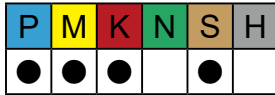
- 3xD Cutting Depth
- UNAX Smooth Coating
- 140° NR Tip
- h8 Tolerance
- Double Margin



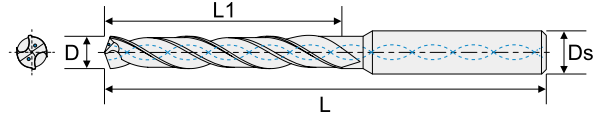
Unit:mm

Order No. 型番	D	L1	L	Ds	Order No. 型番	D	L1	L	Ds
DMC30390034UX	3.90	24	66	4	DMC30810030UX	8.10	47	89	10
DMC30400030UX	4.00	24	66	6	DMC30820030UX	8.20	47	89	10
DMC30410030UX	4.10	24	66	6	DMC30830030UX	8.30	47	89	10
DMC30420030UX	4.20	24	66	6	DMC30840030UX	8.40	47	89	10
DMC30430030UX	4.30	24	66	6	DMC30850030UX	8.50	47	89	10
DMC30440030UX	4.40	24	66	6	DMC30860030UX	8.60	47	89	10
DMC30450030UX	4.50	24	66	6	DMC30870030UX	8.70	47	89	10
DMC30460030UX	4.60	24	66	6	DMC30880030UX	8.80	47	89	10
DMC30465030UX	4.65	24	66	6	DMC30890030UX	8.90	47	89	10
DMC30470030UX	4.70	24	66	6	DMC30900030UX	9.00	47	89	10
DMC30476030UX	4.76(3/16")	24	66	6	DMC30910030UX	9.10	47	89	10
DMC30480030UX	4.80	28	66	6	DMC30920030UX	9.20	47	89	10
DMC30490030UX	4.90	28	66	6	DMC30925030UX	9.25	47	89	10
DMC30500030UX	5.00	28	66	6	DMC30930030UX	9.30	47	89	10
DMC30510030UX	5.10	28	66	6	DMC30940030UX	9.40	47	89	10
DMC30520030UX	5.20	28	66	6	DMC30950030UX	9.50	47	89	10
DMC30530030UX	5.30	28	66	6	DMC30952030UX	9.52(3/8")	47	89	10
DMC30540030UX	5.40	28	66	6	DMC30960030UX	9.60	47	89	10
DMC30550030UX	5.50	28	66	6	DMC30970030UX	9.70	47	89	10
DMC30556030UX	5.56(7/32")	28	66	6	DMC30980030UX	9.80	47	89	10
DMC30560030UX	5.60	28	66	6	DMC30990030UX	9.90	47	89	10
DMC30570030UX	5.70	28	66	6	DMC31000030UX	10.00	47	89	10
DMC30580030UX	5.80	28	66	6	DMC31020030UX	10.20	55	102	12
DMC30590030UX	5.90	28	66	6	DMC31050030UX	10.50	55	102	12
DMC30600030UX	6.00	28	66	6	DMC31070030UX	10.70	55	102	12
DMC30610030UX	6.10	34	79	8	DMC31100030UX	11.00	55	102	12
DMC30620030UX	6.20	34	79	8	DMC31120030UX	11.20	55	102	12
DMC30630030UX	6.30	34	79	8	DMC31150030UX	11.50	55	102	12
DMC30635030UX	6.35(1/4")	34	79	8	DMC31170030UX	11.70	55	102	12
DMC30640030UX	6.40	34	79	8	DMC31200030UX	12.00	55	102	12
DMC30650030UX	6.50	34	79	8	DMC31250030UX	12.50	60	107	14
DMC30660030UX	6.60	34	79	8	DMC31270030UX	12.70(1/2")	60	107	14
DMC30670030UX	6.70	34	79	8	DMC31300030UX	13.00	60	107	14
DMC30680030UX	6.80	34	79	8	DMC31350030UX	13.50	60	107	14
DMC30690030UX	6.90	34	79	8	DMC31370030UX	13.70	60	107	14
DMC30700030UX	7.00	34	79	8	DMC31400030UX	14.00	60	107	14
DMC30710030UX	7.10	41	79	8	DMC31450030UX	14.50	65	115	16
DMC30714030UX	7.14(9/32")	41	79	8	DMC31470030UX	14.70	65	115	16
DMC30720030UX	7.20	41	79	8	DMC31500030UX	15.00	65	115	16
DMC30730030UX	7.30	41	79	8	DMC31550030UX	15.50	65	115	16
DMC30740030UX	7.40	41	79	8	DMC31570030UX	15.70	65	115	16
DMC30750030UX	7.50	41	79	8	DMC31600030UX	16.00	65	115	16
DMC30760030UX	7.60	41	79	8	DMC31800030UX	18.00	73	123	18
DMC30770030UX	7.70	41	79	8	DMC31900030UX	19.00	79	131	20
DMC30780030UX	7.80	41	79	8	DMC32000030UX	20.00	79	131	20
DMC30790030UX	7.90	41	79	8					
DMC30794030UX	7.94(5/16")	41	79	8					
DMC30800030UX	8.00	41	79	8					

DMC - Internal Coolant · 5D for Stainless Steel ステンレス鋼、耐熱合金用内部給油ドリル



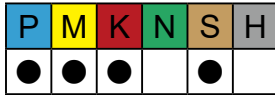
- 5×D Cutting Depth
- UNAX Smooth Coating
- 140° NR Tip
- h8 Tolerance
- Double Margin



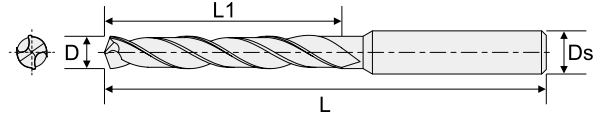
Unit:mm

Order No. 型番	D	L1	L	Ds	Order No. 型番	D	L1	L	Ds
DMC50340054UX	3.40	28	60	4	DMC50790050UX	7.90	53	91	8
DMC50350054UX	3.50	28	60	4	DMC50794050UX	7.94(5/16")	53	91	8
DMC50370054UX	3.70	28	60	4	DMC50800050UX	8.00	53	91	8
DMC50380054UX	3.80	36	74	4	DMC50810050UX	8.10	61	103	10
DMC50400050UX	4.00	36	74	6	DMC50820050UX	8.20	61	103	10
DMC50410050UX	4.10	36	74	6	DMC50830050UX	8.30	61	103	10
DMC50420050UX	4.20	36	74	6	DMC50840050UX	8.40	61	103	10
DMC50430050UX	4.30	36	74	6	DMC50850050UX	8.50	61	103	10
DMC50440050UX	4.40	36	74	6	DMC50860050UX	8.60	61	103	10
DMC50450050UX	4.50	36	74	6	DMC50870050UX	8.70	61	103	10
DMC50460050UX	4.60	36	74	6	DMC50880050UX	8.80	61	103	10
DMC50465050UX	4.65	36	74	6	DMC50890050UX	8.90	61	103	10
DMC50470050UX	4.70	36	74	6	DMC50900050UX	9.00	61	103	10
DMC50476050UX	4.76(3/16")	36	74	6	DMC50910050UX	9.10	61	103	10
DMC50480050UX	4.80	44	82	6	DMC50920050UX	9.20	61	103	10
DMC50490050UX	4.90	44	82	6	DMC50925050UX	9.25	61	103	10
DMC50500050UX	5.00	44	82	6	DMC50930050UX	9.30	61	103	10
DMC50510050UX	5.10	44	82	6	DMC50940050UX	9.40	61	103	10
DMC50520050UX	5.20	44	82	6	DMC50950050UX	9.50	61	103	10
DMC50530050UX	5.30	44	82	6	DMC50952050UX	9.52(3/8")	61	103	10
DMC50540050UX	5.40	44	82	6	DMC50960050UX	9.60	61	103	10
DMC50550050UX	5.50	44	82	6	DMC50970050UX	9.70	61	103	10
DMC50555050UX	5.55(7/32")	44	82	6	DMC50980050UX	9.80	61	103	10
DMC50560050UX	5.60	44	82	6	DMC50990050UX	9.90	61	103	10
DMC50570050UX	5.70	44	82	6	DMC51000050UX	10.00	61	103	10
DMC50580050UX	5.80	44	82	6	DMC51020050UX	10.20	71	118	12
DMC50590050UX	5.90	44	82	6	DMC51050050UX	10.50	71	118	12
DMC50600050UX	6.00	44	82	6	DMC51070050UX	10.70	71	118	12
DMC50610050UX	6.10	53	91	8	DMC51100050UX	11.00	71	118	12
DMC50620050UX	6.20	53	91	8	DMC51120050UX	11.20	71	118	12
DMC50630050UX	6.30	53	91	8	DMC51150050UX	11.50	71	118	12
DMC50635050UX	6.35(1/4")	53	91	8	DMC51170050UX	11.70	71	118	12
DMC50640050UX	6.40	53	91	8	DMC51200050UX	12.00	71	118	12
DMC50650050UX	6.50	53	91	8	DMC51250050UX	12.50	77	124	14
DMC50660050UX	6.60	53	91	8	DMC51270050UX	12.70(1/2")	77	124	14
DMC50670050UX	6.70	53	91	8	DMC51300050UX	13.00	77	124	14
DMC50680050UX	6.80	53	91	8	DMC51350050UX	13.50	77	124	14
DMC50690050UX	6.90	53	91	8	DMC51370050UX	13.70	77	124	14
DMC50700050UX	7.00	53	91	8	DMC51400050UX	14.00	77	124	14
DMC50710050UX	7.10	53	91	8	DMC51450050UX	14.50	83	133	16
DMC50714050UX	7.14(9/32")	53	91	8	DMC51470050UX	14.70	83	133	16
DMC50720050UX	7.20	53	91	8	DMC51500050UX	15.00	83	133	16
DMC50730050UX	7.30	53	91	8	DMC51550050UX	15.50	83	133	16
DMC50740050UX	7.40	53	91	8	DMC51570050UX	15.70	83	133	16
DMC50750050UX	7.50	53	91	8	DMC51600050UX	16.00	83	133	16
DMC50760050UX	7.60	53	91	8	DMC51800050UX	18.00	93	143	18
DMC50770050UX	7.70	53	91	8	DMC51900050UX	19.00	101	153	20
DMC50780050UX	7.80	53	91	8	DMC52000050UX	20.00	101	153	20

DMN - External Coolant · 3D for Stainless Steel ステンレス鋼、耐熱合金用外部給油ドリル



- 3xD Cutting Depth
- UNAX Smooth Coating
- 140° NR Tip
- h8 Tolerance
- Double Margin



Unit:mm

Order No. 型番	D	L1	L	Ds	Order No. 型番	D	L1	L	Ds
DMN30400030UX	4.00	24	66	6	DMN30820030UX	8.20	47	89	10
DMN30410030UX	4.10	24	66	6	DMN30830030UX	8.30	47	89	10
DMN30420030UX	4.20	24	66	6	DMN30840030UX	8.40	47	89	10
DMN30430030UX	4.30	24	66	6	DMN30850030UX	8.50	47	89	10
DMN30440030UX	4.40	24	66	6	DMN30860030UX	8.60	47	89	10
DMN30450030UX	4.50	24	66	6	DMN30870030UX	8.70	47	89	10
DMN30460030UX	4.60	24	66	6	DMN30880030UX	8.80	47	89	10
DMN30465030UX	4.65	24	66	6	DMN30890030UX	8.90	47	89	10
DMN30470030UX	4.70	24	66	6	DMN30900030UX	9.00	47	89	10
DMN30476030UX	4.76(3/16")	24	66	6	DMN30910030UX	9.10	47	89	10
DMN30480030UX	4.80	28	66	6	DMN30920030UX	9.20	47	89	10
DMN30490030UX	4.90	28	66	6	DMN30925030UX	9.25	47	89	10
DMN30500030UX	5.00	28	66	6	DMN30930030UX	9.30	47	89	10
DMN30510030UX	5.10	28	66	6	DMN30940030UX	9.40	47	89	10
DMN30520030UX	5.20	28	66	6	DMN30950030UX	9.50	47	89	10
DMN30530030UX	5.30	28	66	6	DMN30952030UX	9.52(3/8")	47	89	10
DMN30540030UX	5.40	28	66	6	DMN30960030UX	9.60	47	89	10
DMN30550030UX	5.50	28	66	6	DMN30970030UX	9.70	47	89	10
DMN30556030UX	5.56(7/32")	28	66	6	DMN30980030UX	9.80	47	89	10
DMN30560030UX	5.60	28	66	6	DMN30990030UX	9.90	47	89	10
DMN30570030UX	5.70	28	66	6	DMN31000030UX	10.00	47	89	10
DMN30580030UX	5.80	28	66	6	DMN31020030UX	10.20	55	102	12
DMN30590030UX	5.90	28	66	6	DMN31050030UX	10.50	55	102	12
DMN30600030UX	6.00	28	66	6	DMN31070030UX	10.70	55	102	12
DMN30610030UX	6.10	34	79	8	DMN31100030UX	11.00	55	102	12
DMN30620030UX	6.20	34	79	8	DMN31110030UX	11.10	55	102	12
DMN30630030UX	6.30	34	79	8	DMN31120030UX	11.20	55	102	12
DMN30635030UX	6.35(1/4")	34	79	8	DMN31150030UX	11.50	55	102	12
DMN30640030UX	6.40	34	79	8	DMN31170030UX	11.70	55	102	12
DMN30650030UX	6.50	34	79	8	DMN31190030UX	11.90	55	102	12
DMN30660030UX	6.60	34	79	8	DMN31200030UX	12.00	55	102	12
DMN30670030UX	6.70	34	79	8	DMN31250030UX	12.50	60	107	14
DMN30680030UX	6.80	34	79	8	DMN31270030UX	12.70(1/2)	60	107	14
DMN30690030UX	6.90	34	79	8	DMN31300030UX	13.00	60	107	14
DMN30700030UX	7.00	34	79	8	DMN31400030UX	14.00	60	107	14
DMN30710030UX	7.10	41	79	8	DMN31600030UX	16.00	65	115	16
DMN30714030UX	7.14(9/32")	41	79	8	DMN31800030UX	18.00	73	123	18
DMN30720030UX	7.20	41	79	8					
DMN30730030UX	7.30	41	79	8					
DMN30740030UX	7.40	41	79	8					
DMN30750030UX	7.50	41	79	8					
DMN30760030UX	7.60	41	79	8					
DMN30770030UX	7.70	41	79	8					
DMN30780030UX	7.80	41	79	8					
DMN30790030UX	7.90	41	79	8					
DMN30794030UX	7.94(5/16")	41	79	8					
DMN30800030UX	8.00	41	79	8					
DMN30810030UX	8.10	47	89	10					

Recommended Cutting Conditions 推奨切削条件

DMC Series (Internal Coolant 内部給油)

Material	Stainless Steel				Titanium Alloy		Nickel Alloy		Carbon Steel / Alloy Steel	
Hardness	< HRC 20		≥ HRC 20		HRC 33 ~ 45		HRC 33 ~ 45		< HRC 35	
Vc	50 ~ 90 m/min		40 ~ 80 m/min		20 ~ 40 m/min		18 ~ 30 m/min		60 ~ 100 m/min	
Dia (mm)	RPM	fr (mm/rev)	RPM	fr (mm/rev)	RPM	fr (mm/rev)	RPM	fr (mm/rev)	RPM	fr (mm/rev)
4	4000 ~ 7200	0.04 ~ 0.11	3200 ~ 6400	0.04 ~ 0.11	1600 ~ 3200	0.04 ~ 0.08	1400 ~ 2400	0.04 ~ 0.08	4800 ~ 8000	0.04 ~ 0.12
6	2700 ~ 4800	0.06 ~ 0.17	2100 ~ 4200	0.06 ~ 0.17	1000 ~ 2100	0.06 ~ 0.12	1000 ~ 1600	0.06 ~ 0.12	3200 ~ 5300	0.06 ~ 0.18
8	2000 ~ 3600	0.08 ~ 0.22	1600 ~ 3200	0.08 ~ 0.22	800 ~ 1600	0.08 ~ 0.16	700 ~ 1200	0.08 ~ 0.16	2400 ~ 4000	0.08 ~ 0.24
10	1600 ~ 2900	0.10 ~ 0.28	1300 ~ 2500	0.10 ~ 0.28	600 ~ 1300	0.10 ~ 0.20	600 ~ 1000	0.10 ~ 0.20	1900 ~ 3200	0.10 ~ 0.30
12	1300 ~ 2400	0.12 ~ 0.33	1000 ~ 2100	0.12 ~ 0.33	500 ~ 1100	0.12 ~ 0.24	500 ~ 800	0.12 ~ 0.24	1600 ~ 2700	0.12 ~ 0.36
16	1000 ~ 1800	0.16 ~ 0.32	800 ~ 1600	0.16 ~ 0.32	400 ~ 800	0.16 ~ 0.32	400 ~ 600	0.16 ~ 0.32	1200 ~ 2000	0.16 ~ 0.40
20	800 ~ 1400	0.20 ~ 0.40	600 ~ 1300	0.20 ~ 0.40	300 ~ 600	0.20 ~ 0.40	300 ~ 500	0.20 ~ 0.40	1000 ~ 1600	0.20 ~ 0.50

DMN Series (External Coolant 外部給油)

Material	Stainless Steel				Titanium Alloy		Nickel Alloy		Carbon Steel / Alloy Steel	
Hardness	< HRC 20		≥ HRC 20		HRC 33 ~ 45		HRC 33 ~ 45		< HRC 35	
Vc	50 ~ 90 m/min		40 ~ 80 m/min		20 ~ 40 m/min		18 ~ 30 m/min		60 ~ 100 m/min	
Dia (mm)	RPM	fr (mm/rev)	RPM	fr (mm/rev)	RPM	fr (mm/rev)	RPM	fr (mm/rev)	RPM	fr (mm/rev)
4	4000 ~ 7200	0.04 ~ 0.08	3200 ~ 6400	0.04 ~ 0.08	1600 ~ 3200	0.04 ~ 0.07	1400 ~ 2400	0.04 ~ 0.07	4800 ~ 8000	0.04 ~ 0.10
6	2700 ~ 4800	0.06 ~ 0.12	2100 ~ 4200	0.06 ~ 0.12	1000 ~ 2100	0.06 ~ 0.11	1000 ~ 1600	0.06 ~ 0.11	3200 ~ 5300	0.06 ~ 0.15
8	2000 ~ 3600	0.08 ~ 0.16	1600 ~ 3200	0.08 ~ 0.16	800 ~ 1600	0.08 ~ 0.14	700 ~ 1200	0.08 ~ 0.14	2400 ~ 4000	0.08 ~ 0.20
10	1600 ~ 2900	0.10 ~ 0.20	1300 ~ 2500	0.10 ~ 0.20	600 ~ 1300	0.10 ~ 0.18	600 ~ 1000	0.10 ~ 0.18	1900 ~ 3200	0.10 ~ 0.25
12	1300 ~ 2400	0.12 ~ 0.24	1000 ~ 2100	0.12 ~ 0.24	500 ~ 1100	0.12 ~ 0.22	500 ~ 800	0.12 ~ 0.22	1600 ~ 2700	0.12 ~ 0.30
16	1000 ~ 1800	0.16 ~ 0.32	800 ~ 1600	0.16 ~ 0.32	400 ~ 800	0.16 ~ 0.29	400 ~ 600	0.16 ~ 0.29	1200 ~ 2000	0.16 ~ 0.40
20	800 ~ 1400	0.20 ~ 0.40	600 ~ 1300	0.20 ~ 0.40	300 ~ 600	0.20 ~ 0.36	300 ~ 500	0.20 ~ 0.36	1000 ~ 1600	0.20 ~ 0.50